



CHIPPEWA CREE ENERGY CORPORATION

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CHIPPEWA CREE ENERGY CORPORATION REQUEST FOR PROPOSALS

MICROGRID DESIGN SERVICES

I. OVERVIEW AND BACKGROUND

Chippewa Cree Energy Corporation (CCEC) was formed by the Chippewa Cree Tribe (CCT) in 2012 as a Section 17 corporation to carry out the goals as outlined in the Chippewa Cree Energy Master Plan, which was completed in 2009. The Chippewa Cree Energy Corporation is managed exclusively by its Board of Directors and charged with the duty to conduct and do business either within or outside the exterior boundaries of the Rocky Boy's Indian Reservation, which is located in Northcentral Montana in the Bear Paw Mountains and encompasses approximately 122,000 acres.

The Chippewa Cree Tribe was selected for Building Resilient Infrastructure and Communities Direct Technical Assistance (BRIC DTA) initiative, to conceptualize the initial parameters for the project to include the installation of a 2-megawatt (MW) solar photovoltaic (PV) array with accompanying battery storage, and three 2 MW natural-gas-fueled generator(s). The proposed project will form a microgrid to provide power to commercial facilities and residences along Upper Box Elder Road in an area referred to as 'the corridor.' The area comprises an estimated 120 residences, Stone Child College, Rocky Boy Health Center, and Rocky Boy Police Station and Justice Center.

As subrecipient of the BRIC DTA initiative, the CCEC hereby seeks proposals from qualified contractors to carry out the 60% engineering design and related services required to implement the initiative mentioned above beginning as soon as possible.

II. SCOPE OF WORK AND PROPOSAL REQUIREMENTS

All responsive proposals must meet the following guidelines and qualifications. Incomplete proposals are deemed invalid and will not be further considered.

Base Design Requirements

The proposers shall provide pricing for the 60% design of a 2-megawatt (MW) solar photovoltaic (PV) array with accompanying 2 MW battery storage system (BESS), and three 2 MW natural-gas-fueled generators located within the Rocky Boy Reservation as shown in the figures included in Appendix A. The microgrid would provide power to commercial facilities and residences along Upper Box Elder Road in an area referred to as 'the corridor.' The area comprises an estimated 120 residences, Stone Child College, Rocky Boy Health Center, and Rocky Boy Police Station and Justice Center. The base design shall include a 10-year Power Purchase Agreement (PPA) agreement between CCEC and Hill County Electric Cooperative (HCEC). The proposers shall assume responsibility for adhering to all CCEC and HCEC rules and regulations and obtaining all permits required including, but not limited to those listed below.

A summary of the proposal steps and documents required include:

1. Conduct a survey to assess site conditions.
2. Conduct a geotechnical study.
3. Conduct a natural gas resource assessment.
4. Conduct an environmental study.
5. Develop an engineering design package to 60%.
6. Conduct a load study to confirm demand of commercial facilities and residences to be connected to the microgrid.
 - a. Confirm or adjust demand assumptions used in preliminary cost estimation prepared by Direct Technical Assistance (DTA) team.
 - b. Confirm whether there are any existing generators that can be tied into the microgrid to support power generation.
7. Prepare and review an updated cost estimate based on design package.
8. Develop a Benefit-Cost Analysis (BCA).
9. Develop an application package.

The following detail is provided to define more specific activities associated with more general items in the above list.

Assessment of Current Conditions

The contractor must assess the extent of coverage of the existing electric power distribution network within the proposed project area on Rocky Boy Reservation and estimate the electricity demand of the local community. The contractor must visit the project area to perform any on-site assessments and meet with project stakeholders. The assessment must include, at minimum, the following:

- Report on electric power distribution within the project area.
- Map-based reference of households, facilities, and key institutions affected by the project.
- GPS coordinates for customers to be connected to the microgrid electricity distribution network.

- Electricity demand for the local distribution network for households, facilities, and key institutions affected by the project.
- Location of all proposed improvements and infrastructure to be evaluated for other hazards such as flooding, erosion, and wind.
- Site visit report.

Engineering Design

The contractor is to obtain the service of an engineering firm to prepare 60% design documentation for the construction and integration of a microgrid (three 2 MW natural gas generators and 2 MW PV solar system) to the existing CCT/Rocky Boy Reservation electrical distribution system. The design must include a review of existing documentation and available record drawings, and a collection of information for use in analyzing the electrical infrastructure, equipment, structures, and site infrastructures for adding the microgrid. The engineering design firm is to conduct engineering evaluations, calculations, and other design activities required to develop the project fully from the concept level to a 60% level. The design is to include evaluation of solar energy generation, energy yield assessment, and energy storage concepts to provide the energy and power backup requirements for the microgrid.

The design deliverables developed by the engineering firm must include up to 60% Design Drawings with a Draft Design Criteria Report for CCEC to review and provide comments, followed by a Final Design Criteria Report and revised 60% Design Drawings. Civil, architectural, mechanical, and electrical design documents are to be provided with the 60% design deliverable. The design is to determine the size of the generation and storage infrastructure, including paralleling switchgear, natural gas generators and enclosures, solar array, inverter strings, charge controllers, battery bank, microgrid controller, cables, controls and protection units, any necessary enclosures for supporting electrical equipment, and all of the components required for the interconnection of the generation plant to the distribution network in compliance with applicable grid codes, including IEEE 1547 and 2030, and HCEC standards/requirements. The 60% Design Drawings shall include site survey, panel layout, single line diagrams, design and installation details, calculations, specification sheets (inverter, combiner boxes, solar panel, and mounting system)

The contractor may submit an alternative design option different than the proposed sized based on the assessment of current conditions but shall not exceed the three-year average onsite electrical load at Rocky Boy Reservation. The solar array shall include string level monitoring and display for the production of the solar array. The inverters and solar panels shall carry a minimum 20-year warranty.

Additionally, if any of the infrastructure that is part of the project is located within the Special Flood Hazard Area, it should be designed in accordance with ASCE 24. A description of all building code and standards that are to be followed will be provided.

Grid Connection

The contractor must meet with relevant authorities, including the electrical utility and the natural gas company, to obtain the necessary information and requirements for connecting the microgrid to the utility's grid. The contractor must develop a full conceptual technical design for the interconnection of the microgrid to the electrical utility's grid, including the infrastructure for stepping up the voltages and paralleling to the utility, based on the contractor's project site assessment and review of utility

interconnection policy and taking into account power station (transformer and auxiliaries), electric lines to the grid, and auxiliary equipment specifications and standards.

Cost Analysis

Provide opinion of probable construction cost for all necessary equipment and infrastructure to form the microgrid, including capital and operating costs for maintenance and for training. Also, prepare budgetary level cost estimates for detailed design, construction, and construction support services for building the microgrid at Rocky Boy Reservation. The cost estimation must be supported by input from engineering, procurement, construction contractors, equipment suppliers, and service providers.

The Detailed Budget Justification shall provide a comprehensive outline of all equipment including but not limited to technology hardware, construction equipment, supplies. In addition, the proposal must include the following information for all units: measurements, number of units, costs per unit, manufacturer of units, versions, and additional accessories or licenses, and support contracts, if any.

Benefit-Cost Analysis (BCA)

Develop a Benefit-Cost Analysis (BCA) to determine the future risk reduction benefits of the project and compare those benefits to the design and construction costs based on FEMA-approved methodologies and tools such as the BCA Toolkit. To accompany the BCA, a narrative outlining the approach and determination of entries to the BCA along with any data or documents used to develop the approach and entries, will also be required.

Application Package

Provide a complete application with required documentation for FEMA hazard mitigation grants under Hazard Mitigation Grand Program (HMGP).

III. PROPOSED PROJECT SCHEDULE

CCEC's proposed schedule for this project is as follows:

I. RFP released	March 15, 2024
II. RFP responses due to CCEC	May 15, 2024
IV. Selection of winning Vendor	May 22, 2024
V. Contract execution and start of project	TBD

IV. COMPENSATION AND PAYMENT TERMS

CCEC will pay the Contractor a fixed fee to be negotiated. Precise amounts of and payment terms for these fees will be negotiated by CCEC once a Contractor is selected.

V. TRIBAL EMPLOYMENT RIGHTS OFFICE (TERO) CODE

The purpose of this code is:

- a. To promulgate laws and rules for governing preference in employment and contracting within Tribal jurisdiction.
- b. To assist with compliance under this Code and enforce the laws governing employment preference and contracting preference.
- c. To provide a fair, enforceable, and effective system for contracting, subcontracting and purchasing supplies, services, labor and materials, where any part of the work will be performed on the Reservation or on Tribal projects off the Reservation.
- d. To require contractors to utilize TERO dispatch in hiring within the boundaries of the Reservation or on Tribal projects off the Reservation
- e. To require a 5 percent TERO fee on the total aggregate cost of all construction projects or construction contracts with total aggregate price of \$5,000 or more.
- f. Business licenses will be required within 14 days from selection of bid.

VI. CHIPPEWA CREE CULTURAL RESOURCES PRESERVATION DEPARTMENT

Cultural preservation on our tribal lands is paramount, with any project/construction that is conducted on the Rocky Boy's Indian Reservation, will need to consult with the Chippewa Cree Cultural Resources Preservation Department.

VII. EVALUATION CRITERIA

CCEC will evaluate responsive proposals based on the following criteria:

- a. Previous relevant experience;
- b. Previous relevant experience performing communications infrastructure buildout services for communities, tribes, schools and institutions of similar size and characteristics to those on the Rocky Boy's Reservation;
- c. Experience and qualifications of technical and management teams;
- d. References; and
- e. Proposed pricing.

VIII. SUBMITTAL INSTRUCTION AND ADMINISTRATIVE INFORMATION

The deadline for receipt of proposals is noon MST on May 15, 2024. All proposals can be submitted via email to jeagleman@connectbrc.com or to the following address:

Chippewa Cree Energy Corporation
Joseph Eagleman Sr.
Chief Executive Officer
61 Laredo Road
Box Elder, MT 59521

Questions regarding this request for proposals can be submitted in writing to Joseph Eagleman Sr. at the above address or by email to jeagleman@connectbrc.com.

Appendix A

Conceptual site of the proposed microgrid:

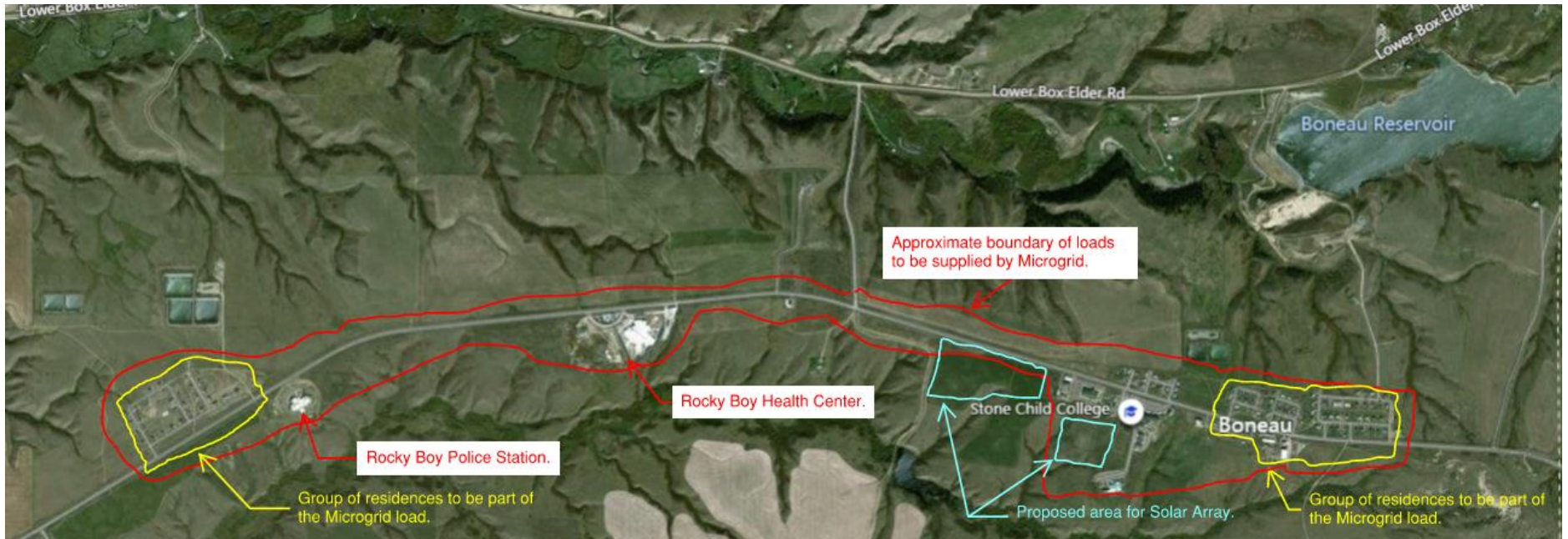


Figure 1: Overall Corridor Aerial Map with Proposed PV Location

Appendix B

High-level conceptual block diagram of the proposed microgrid:

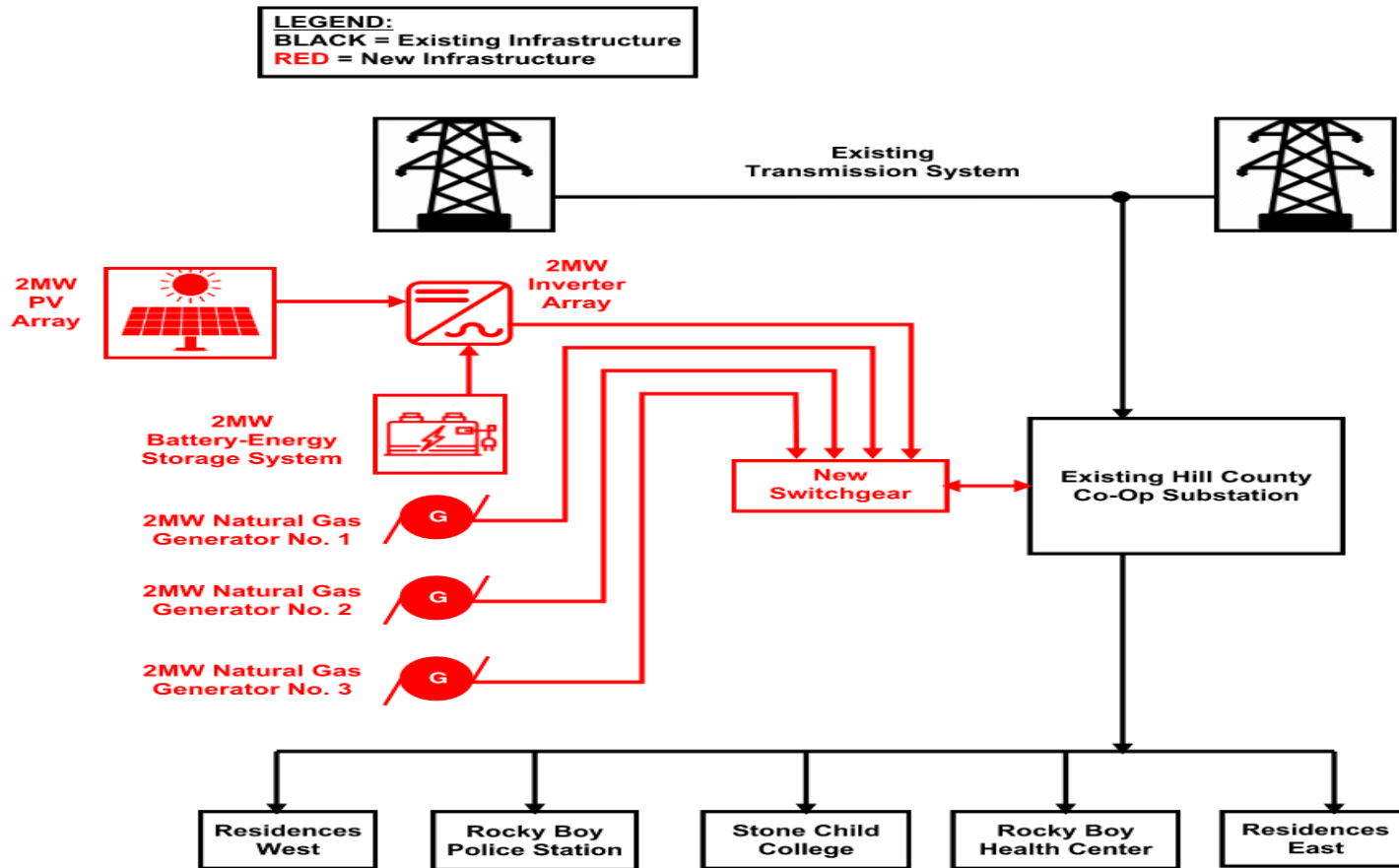


Figure 2: Conceptual One-Line Block Diagram

This figure is conceptual and diagrammatic only and does not indicate equipment ratings and voltages. Also, the existing system distribution scheme may differ from the representation shown.